

WHAT IS CLAIMED IS:

- 1        1.     A method for inhibiting interleukin-17 (IL-17) production by T cells
- 2        comprising treating said T cells with an antagonist of interleukin-23 (IL-23).
  
- 1        2.     The method of claim 1 wherein said T cells are activated T cells.
  
- 1        3.     The method of claim 1 wherein said T cells are memory cells.
  
- 1        4.     The method of claim 1 wherein said treatment is performed *in vivo*.
  
- 1        5.     The method of claim 1 wherein said treatment is performed in a mammalian
- 2        subject.
  
- 1        6.     The method of claim 5 wherein said mammalian subject is human.
  
- 1        7.     The method of claim 6 wherein said antagonist is an anti-IL-23 or an anti-IL-
- 2        23 receptor antibody.
  
- 1        8.     The method of claim 7 wherein said antibody is an antibody fragment.
  
- 1        9.     The method of claim 8 wherein said antibody fragment is selected from the
- 2        group consisting of Fv, Fab, Fab', and F(ab')<sub>2</sub>.
  
- 1        10.    The method of claim 7 wherein said antibody is a full-length antibody.
  
- 1        11.    The method of claim 7 wherein said antibody is chimeric.
  
- 1        12.    The method of claim 7 wherein said antibody is humanized.
  
- 1        13.    The method of claim 7 wherein said antibody is human.

1           14. A method for the treatment of an inflammatory disease characterized by  
2 elevated expression of interleukin 17 (IL-17) in a mammalian subject, comprising  
3 administering to said subject an effective amount of an antagonist of interleukin-23 (IL-23).

1           15. The method of claim 14 wherein said mammalian subject is human.

1           16. The method of claim 15 wherein said inflammatory disease is selected from  
2 chronic inflammation, autoimmune diabetes, rheumatoid arthritis (RA), rheumatoid  
3 spondylitis, gouty arthritis and other arthritic conditions, multiple sclerosis (MS), asthma,  
4 systemic lupus erythematosus, adult respiratory distress syndrome, Behcet's disease,  
5 psoriasis, chronic pulmonary inflammatory disease, graft versus host reaction, Crohn's  
6 Disease, ulcerative colitis, inflammatory bowel disease (IBD), Alzheimer's disease, and  
7 pyresis.

1           17. The method of claim 16 wherein said inflammatory disease is a chronic  
2 inflammatory disease.

1           18. The method of claim 17 wherein said chronic inflammatory disease is selected  
2 from the group consisting of rheumatoid arthritis (RA), graft versus host reaction, multiple  
3 sclerosis (MS), and psoriasis.

1           19. The method of claim 15 wherein said antagonist is an anti-IL-23 or an anti-IL-  
2 23 receptor antibody.

1           20. The method of claim 19 wherein said antibody is an antibody fragment.

1           21. The method of claim 20 wherein said antibody fragment is selected from the  
2 group consisting of Fv, Fab, Fab', and F(ab')<sub>2</sub>.

1           22. The method of claim 19 wherein said antibody is a full-length antibody.

- 1        23. The method of claim 19 wherein said antibody is chimeric.
- 1        24. The method of claim 19 wherein said antibody is humanized.
- 1        25. The method of claim 19 wherein said antibody is human.
- 1        26. The method of claim 15 wherein said antagonist is administered in  
2 combination with an additional therapeutic agent.
- 1        27. The method of claim 26 wherein said additional therapeutic agent is an anti-  
2 inflammatory molecule.
- 1        28. The method of claim 27 wherein said anti-inflammatory molecule is selected  
2 from the group consisting of corticosteroids and non-steroidal anti-inflammatory drugs  
3 (NSAIDs).
- 1        29. A method for identifying an anti-inflammatory agent comprising the steps of:  
2            (a) incubating a culture of T cells with IL-23, in the presence and absence of a  
3 candidate molecule;  
4            (b) monitoring the level of IL-17 in said culture; and  
5            (c) identifying said candidate molecule as an anti-inflammatory agent if the level  
6 of IL-17 is lower in the presence than in the absence of said candidate molecule.
- 1        30. The method of claim 29 wherein said candidate molecule is a non-peptide  
2 small organic molecule.
- 1        31. The method of claim 29 wherein said candidate molecule is a peptide.
- 1        32. The method of claim 29 wherein said candidate molecule is a polypeptide.
- 1        33. The method of claim 29 wherein said candidate molecule is an antibody.

- 1        34.     The method of claim 29 wherein said T cells are activated T cells.
- 1        35.     The method of claim 29 wherein said T cells are memory cells.
- 1        36.     The method of claim 29 wherein the level of IL-17 is monitored by ELISA.
- 1        37.     An anti-inflammatory agent identified by the method of claim 29.
- 1        38.     A method for inducing IL-17 production in a mammalian subject comprising  
2        administering to said subject an IL-23 agonist.
- 1        39.     The method of claim 38 wherein said mammalian subject is human.
- 1        40.     The method of claim 39 wherein the human subject has been exposed to  
2        bacterial infection.
- 1        41.     The method of claim 40 wherein the human subject has been exposed to  
2        infection by *Mycobacterium tuberculosis*.
- 1        42.     The method of claim 39 wherein said IL-23 agonist is an antibody.
- 1        43.     The method of claim 42 wherein said antibody is an anti-IL-23 or anti-IL-23  
2        receptor antibody.
- 1        44.     The method of claim 43 wherein said antibody is an antibody fragment.
- 1        45.     The method of claim 44 wherein said antibody fragment is selected from the  
2        group consisting of Fv, Fab, Fab' and F(ab')<sub>2</sub>.
- 1        46.     The method of claim 43 wherein said antibody is a full-length antibody.

- 1        47. The method of claim 43 wherein said antibody is chimeric.
- 1        48. The method of claim 43 wherein said antibody is humanized.
- 1        49. The method of claim 43 wherein said antibody is human.